Chilton's
JUNE 6, 1983

IRON AGE

THE MAGAZINE FOR METAL PRODUCING MANAGEMENT

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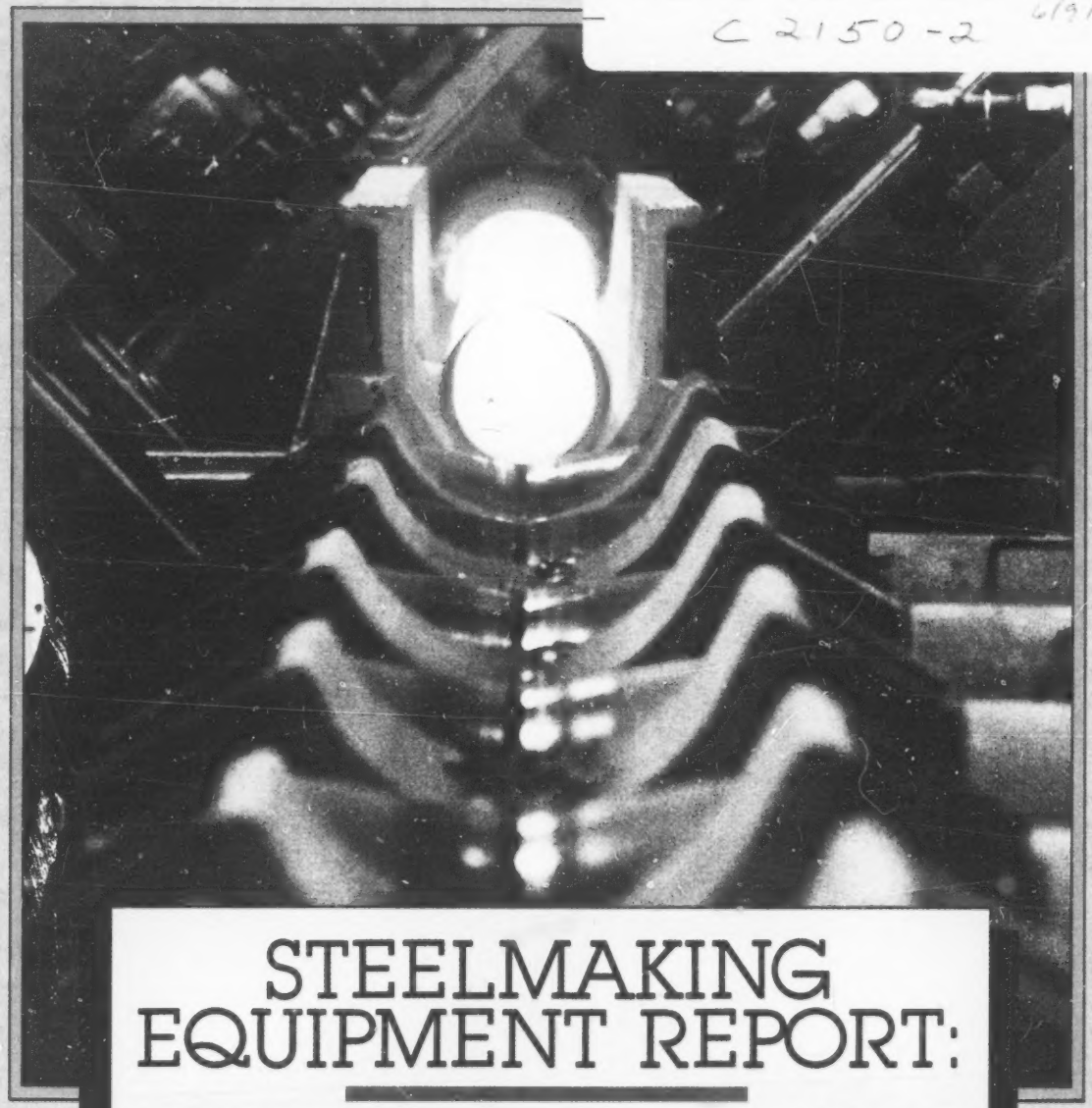


STEELMAKING EQUIPMENT REPORT:

WAITING FOR A TURN

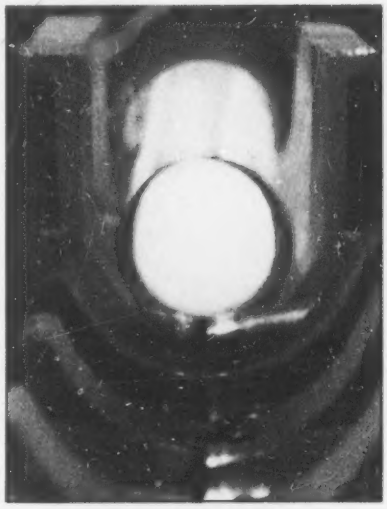
CHAPARRAL STEEL: TURNING A MINI-MILL INTO A MARKET MILL

RARITAN RIVER: THE MOUSE THAT'S ROARING

VOL. 226, NO. 16

IRON AGE

JUNE 6, 1983



COVER STORY

MP-6 STEEL'S EQUIPMENT SUPPLIERS AWAIT THE UPTURN
A market recovery could trigger the modernization push that will benefit steelmakers and their suppliers.

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After years of hostility, the government and industry may not be so far apart, but middlemen keep stoking the fire.

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MP-21 CHAPARRAL: A MINI MILL BECOMES A MARKET MILL
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MP-28 RARITAN RIVER: THE MOUSE THAT'S ROARING
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Minaturized Power Sources

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MATERIALS NEWSFRONT

Important Notice About Iron Age Scrap Prices

Beginning with the Jan. 21 issue Iron Age has been publishing only one set of scrap prices per issue—those with the effective date as close to the issue date as printing schedules permit. Prices for other weeks are available on a weekly basis through our Metal Price Phone Hotline or through our Weekly Price Newsletter.

Steel Production, Composite Prices

(Effective May 23, 1983)

U.S. Steel Production	Last Week	Two Weeks Ago	To Date 1983	To Date 1982
Net tons, in thousands	1,697	1,701	30,759	33,615
Capability Utilization Rate	58.7	58.8	52.7	56.6

Composite Prices	This Week	Week Ago	Month Ago	Year Ago
Finished Steel Base* (¢/lb.—eff. 2/14/83)	26.217	26.217	26.217	25.297
Pig Iron* * (Net ton= 2000 lbs.)	$213.00	$213.00	$213.00	$213.00
Scrap No. 1 hvy.* * * (Gross ton=2240 lbs.)	$ 67.50	$ 66.83	$ 66.83	$ 64.17
No. 2 bundles	$ 46.50	$ 46.50	$ 46.83	$ 45.50
Scrap Comparison (Gross Ton)				
No. 1 steel, Pittsburgh	$ 68.50	$ 68.50	$ 68.50	$ 64.50
No. 1 steel, Philadelphia	66.50	64.50	64.50	66.50
No. 1 steel, Chicago	67.50	67.50	67.50	61.50
No. 1 bundles, Detroit	69.50	69.50	69.50	57.50
Low Phos., Youngstown	71.50	72.50	69.50	73.50
No. 1 mach'y cast., Pgh	74.50	74.50	74.50	79.50
No. 1 mach'y cast., Phila	98.50	98.50	98.50	110.50
No. 1 mach'y cast., Chi	108.50	108.50	108.50	119.50

*Finished Steel Composite
Weighted index of steel bars, shapes, plates, wire, rails, black pipe, hot and cold rolled sheets and strips.

* *Pig Iron Composite
Based on average prices for basic and foundry pig iron at representative producing points within the U.S.

* * *Steel Scrap Composite
Average of No. 1 hvy. melting steel scrap and No. 2 bundles delivered to consumers at Pittsburgh, Philadelphia and Chicago.

Lake Superior Ore Prices

51.50% Fe Natural delivered lower Lake ports. Rail transportation, handling and unloading may be charged to the account of the buyer. Coarse ore 80¢ premium.

Pellets (per iron unit natural)..... gross-ton 80.50-86.9*
Old range, non-bessemer ..... gross-ton $32.78
Mesabi, regular-unscreened ..... gross-ton $32.53
Mesabi, non-bessemer.....gross-ton $32.25-32.53**

*80.50¢—Pickands Mather as of 1/27/81.
**86.9¢—U. S. Steel as of 3/15/82. Cleveland-Cliffs as of 2/26/82, Oglebay Norton as of 3/25/82, and Hanna Mining as of 2/26/82.

Nonferrous Prices

(Effective May 23, 1983)
Prices obtained in trade based on representative tonnages per gross ton delivered to consumer unless otherwise stated.

Primary Metal Prices

(cents per lb.)	current price	last price	date of change
Aluminum	76.00 (Nom.)	76.00-80.00	1/4/82
Copper (C)	82.50-84.00	81.50-84.00	5/10/83
Lead	20.00-23.00	21.00-23.00	5/4/83
Magnesium Ingot	134.00-138.00	134.00	5/16/83
Nickel	329.00	350.00	11/25/81
Titanium Sponge	555.00-585.00	555.00	4/29/82
Zinc	40.00	38.00-40.00	4/27/83

ALUMINUM: 99.5%. COPPER (C) = cathode. LEAD: common grade. MAGNESIUM: 99.8% pig. Velasco, Tex. NICKEL: electro., Port Colborne, Canada. ZINC: high grade.

Antimony, American Laredo, Texas . $2.00
Beryllium-aluminum 5% Be, per lb. contained Be $215.00
Beryllium-copper, per lb. cont. Be $130.00
Beryllium 97% powder 200 ..... $166.00
Bismuth, ton lots ..... $1.55-$1.70
Cadmium, under one ton ..... $1.05-$1.15
Calcium, ton lots, crown $3.05
Chromium, 99.8% $3.75
Cobalt, 99%, cathode $12.50
Gold per troy oz. $432.75
Indium, dollars per troy oz. $3.10
Iridium, dollars per troy oz. $600
Magnesium sticks, 10,000 lbs. $1.91
Mercury, per 76-lb. f.o.b. N.Y. ..$300-$320
Molybdenum, lb. tech. moly oxides, 20 lb. MO can $5.85
Nickel oxide sinter at U.S. points of entry $3.12
Palladium, per troy oz. $140
Platinum, per troy oz. $475
Rhodium, per troy oz. $600.00
Silver ingots, per troy oz. $12.77
Vanadium $4.94
Zirconium sponge..... $12.00-$17.00
(Per lb. unless otherwise noted)

Straits Tin Price

(U.S. cents per lb, EX-SMELTER, based on daily market in Penang in Malaysian dollars per kilo.)

May 16—606.27
May 17—605.99
May 18—607.44
May 19—606.18
May 20—607.50

Scrap Prices

Brass Mill Scrap

(Cents per lb; over 20,000 lbs. add 1¢ per lb)

	Solids	Turning
Copper	79½	70¼
Yellow brass	67⅛	61⅛
Red brass	72⅞	65½
Comm. bronze	74⅝	67
Mang. bronze	65¼	63⅝
Free cutting rod ends	59	58

Custom Smelters Scrap

(Cents per lb., carload lots, del. refinery)

No. 1 copper wire	72
No. 2 copper wire	64
Light copper	55

Ingot Makers Scrap

(Cents per lb., carload lots, del. refinery)

No. 1 copper wire	68
No. 2 copper wire	60
Light copper	51
No. 1 composition	57
No. 1 comp. turnings	54
Hvy. yellow brass solids	38
Hvy. yellow brass turnings	30
Radiators	46

Aluminum

New mixed clips	41	—42
Old sheet	39	—40
Old cast	39	—40
Clean dry borings	39	—40

Dealers' Scrap

(Dealers' buying price f.o.b. New York in cents per pound)

Aluminum

Segregated clippings	31	—33
Mixed L.C. clips	27	—28
Old sheets and cast	24	—25
Borings and turnings	16	—17
Duraluminum clippings	26	—27

Copper and Brass

No. 1 copper wire	61	—62
No. 2 copper wire	54	—55
Light copper	47	—48
Radiators	38	—39
No. 1 composition	48	—49
No. 1 composition turn'gs	45	—46
Cocks and faucets	34	—35
Clean heavy yellow brass	32	—33
Brass Pipe	33	—34
New soft brass clippings	48	—49

Lead

Heavy soft lead	10	—11
Whole batteries	4	— 5
Type metal	15	—16
Electrotype	15	—17

Nickel

Nickel solids	110	—120
Nickel rod ends	110	—120
Nickel sheets, clips	110	—120
Nickel turnings	60	— 70

Zinc

New zinc clippings	15	—16
Old diecast zinc	9	—10

MATERIALS NEWSFRONT

(Effective May 23, 1983) Prices obtained in trade based on representative tonnages per gross ton delivered to consumer unless otherwise stated. Prices are the opinions of *Iron Age* editors and correspondents, based on contacts with dealers, brokers, generators and users in the industry on the effective date listed above.

Ferrous Scrap Prices

Pittsburgh

No. 1 hvy. melting	$ 68.00 to	$ 69.00
No. 2 hvy. melting	60.00 to	61.00
No. 1 dealer bundles	85.00 to	86.00
No. 1 factory bundles (auto)	85.00 to	86.00
No. 2 bundles	51.00 to	52.00
No. 1 busheling	85.00 to	86.00
Machine shop turn.	7.00 to	8.00
Shoveling turnings	26.00 to	27.00
Cast iron borings	25.00 to	26.00
Low phos. punchings plate	88.00 to	89.00
Heavy turnings	60.00 to	61.00
No. 1 RR hvy. melting	76.00 to	77.00
Rails 2 ft. and under	95.00 to	96.00
Scrap rails, random lgth.	80.00 to	81.00
RR specialties	87.00 to	88.00
No. 1 machinery cast	74.00 to	75.00
Cupola cast	67.00 to	68.00
Heavy breakable cast	30.00 to	31.00
Stainless		
18-8 bundles and solids	590.00 to	600.00
18-8 turnings	490.00 to	500.00

Chicago

No. 1 hvy. melting	$ 67.00 to	$ 68.00
No. 2 hvy. melting	60.00 to	61.00
No. 1 dealer bundles	81.00 to	82.00
No. 1 factory bundles (auto)	81.00 to	82.00
No. 2 dealer bundles	44.00 to	45.00
No. 1 busheling	75.00 to	76.00
Shredder scrap	75.00 to	76.00
Machine shop turn.	17.00 to	18.00
Mixed bor. and turn.	18.00 to	19.00
Shoveling turnings	24.00 to	25.00
Cast iron borings	37.00 to	38.00
Low phos. forge crop	87.00 to	88.00
Low phos. punchings plate ¼ in. and heavier	94.00 to	95.00
Low phos. 2 ft. and under	89.00 to	90.00
No. 1 RR hvy. melting	79.00 to	80.00
Scrap rails, random lgth.	67.00 to	68.00
Reroller rails	93.00 to	94.00
Rails, 2 ft. and under	90.00 to	91.00
RR couplers and knuckles	77.00 to	78.00
RR car axles	109.00 to	110.00
No. 1 machinery cast	108.00 to	109.00
Cupola cast	93.00 to	94.00
Stove plate	92.00 to	93.00
Steel car wheels	79.00 to	80.00
Stainless		
18-8 bundles and solids	550.00 to	560.00
18-8 turnings	450.00 to	460.00
430 bundles and solids	135.00 to	140.00
430 turnings	100.00 to	105.00

Philadelphia

No. 1 hvy. melting	$ 65.00 to	$ 68.00
No. 2 hvy. melting	54.00 to	57.00
No. 1 dealer bundles	76.00 to	79.00
No. 2 dealer bundles	42.00 to	45.00
No. 1 busheling	76.00 to	79.00
Shredder scrap	76.00 to	79.00
Machine shop turn.	23.00 to	26.00
Mixed bor. and turn.	23.00 to	26.00
Shoveling turnings	40.00 to	43.00
Low phos. 5 ft. and under	77.00 to	80.00
Low phos. 2 ft. punchings	89.00 to	92.00
Electric furnace bundles	93.00 to	96.00
RR specialties	80.00 to	83.00
Rails, 2 ft. and under	92.00 to	95.00
Cupola cast	58.00 to	61.00
Heavy breakable cast	53.00 to	56.00
No. 1 machinery cast	97.00 to	100.00

Detroit

Broker buying prices per gross ton on cars:

No. 1 hvy. melting	$ 47.00 to	$ 48.00
No. 2 hvy. melting	45.00 to	46.00
No. 1 dealer bundles	69.00 to	70.00
No. 2 bundles	28.00 to	29.00
No. 1 busheling	66.00 to	67.00
Drop forge flashings	42.00 to	43.00
Machine shop turn.	25.00 to	26.00
Mixed borings and turn.	13.00 to	14.00
Shoveling turnings	25.00 to	26.00
Cast iron borings	13.00 to	14.00
Heavy breakable cast	32.00 to	33.00
Mixed cupola cast	48.00 to	49.00
Automobile cast	71.00 to	72.00
Stainless		
18-8 bundles and solids	470.00 to	480.00
18-8 turnings	350.00 to	360.00
430 bundles and solids	115.00 to	125.00

Youngstown

No. 1 hvy. melting	$ 64.00 to	$ 67.00
No. 2 hvy. melting	56.00 to	59.00
No. 1 dealer bundles	75.00 to	78.00
No. 2 dealer bundles	37.00 to	40.00
Machine shop turn.	1.00 to	3.00
Shoveling turnings	5.00 to	8.00
Low phos. plate	70.00 to	73.00
Electric furnace bundles	68.00 to	71.00
Galvanized bundles	58.00 to	61.00

Cleveland

No. 1 hvy. melting	$ 57.00 to	$ 60.00
No. 2 hvy. melting	27.00 to	30.00
No. 1 dealer bundles	71.00 to	74.00
No. 1 factory bundles	74.00 to	77.00
No. 2 bundles	22.00 to	25.00
No. 1 busheling	71.00 to	74.00
Machine shop turn.	1.00 to	4.00
Mixed bor. and turn.	1.00 to	4.00
Shoveling turnings	3.00 to	6.00
Cast iron borings	6.00 to	9.00
Cut structural & plates, 2 ft. and under	87.00 to	90.00
Low phos. punchings plate	87.00 to	90.00
Drop forge flashings	31.00 to	34.00
Foundry steel, 2 ft. & under	57.00 to	60.00
No. 1 RR hvy melting	61.00 to	64.00
Rails, 2 ft. and under	91.00 to	94.00
Rails, 18 in. and under	92.00 to	95.00
Steel axle turnings	67.00 to	70.00
Railroad cast	80.00 to	83.00
No. 1 machinery cast	87.00 to	90.00
Cupola cast	60.00 to	63.00
Stove plate	45.00 to	48.00
Stainless		
18-8 bundles	325.00 to	335.00
18-8 turnings	275.00 to	285.00
430 bundles	80.00 to	85.00

Buffalo

No. 1 hvy. melting	$ 33.00 to	$ 34.00
No. 2 hvy. melting	23.00 to	24.00
No. 1 busheling	38.00 to	39.00
No. 1 dealer bundles	36.00 to	38.00
No. 2 bundles	20.00 to	21.00
Machine shop turn.	9.00 to	10.00
Mixed bor. and turn.	16.00 to	17.00
Shoveling turnings	18.00 to	19.00
Cast iron borings	15.00 to	16.00
Low phos. plate	56.00 to	57.00
Structural and plate, 2 ft. and under	54.00 to	55.00
Rails, 2 ft. and under	50.00 to	51.00
Scrap rails, random lgth.	30.00 to	31.00
No. 1 machinery cast	71.00 to	72.00
No. 1 cupola cast	48.00 to	49.00

St. Louis

No. 1 hvy. melting	$ 58.00 to	$ 59.00
No. 2 hvy. melting	47.00 to	48.00
Foundry steel, 2 ft.	47.00 to	48.00
No. 1 dealer bundles	58.00 to	59.00
No. 2 bundles	44.00 to	45.00
Machine shop turn.	12.00 to	13.00
Shoveling turnings	18.00 to	19.00
Cast iron borings	30.00 to	31.00
No. 1 RR hvy. melting	58.00 to	59.00
Rails, random length	61.00 to	62.00
Rails, 18 in. and under	76.00 to	77.00
RR specialties	80.00 to	81.00
Cupola cast	70.00 to	71.00
Heavy breakable cast	48.00 to	49.00
Stove plate	82.00 to	83.00
Cast iron car wheels	49.00 to	50.00
Rerolling rails	96.00 to	97.00
Unstripped motor blocks	55.00 to	56.00

Birmingham

No. 1 heavy melting	$ 64.00 to	$ 65.00
No. 2 heavy melting	59.00 to	60.00
No. 1 dealer bundles	64.00 to	65.00
No. 2 bundles	45.00 to	46.00
No. 1 busheling	63.00 to	64.00
Shredder scrap	77.00 to	78.00
Machine shop. turn.	24.00 to	25.00
Shoveling turnings	35.00 to	36.00
Cast iron borings	35.00 to	36.00
Electric furnace bundles	62.00 to	63.00
Elec. furnace, 3 ft. & under	59.00 to	60.00
Structural and plate, 2 ft.	76.00 to	77.00
Structural and plate, 4 ft.	73.00 to	74.00
No. 1 RR hvy. melting	63.00 to	64.00
Scrap rails, random lgth.	68.00 to	69.00
Rails, 18 in. and under	86.00 to	87.00
Angles and splice bars	76.00 to	77.00
No. 1 cupola cast	84.00 to	85.00
Unstripped motor blocks	59.00 to	60.00

Cincinnati

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 48.00 to	$ 49.00
No. 2 hvy. melting	48.00 to	49.00
No. 1 dealer bundles	53.00 to	54.00
No. 2 bundles	27.00 to	28.00
Machine shop turn.	6.00 to	7.00
Shoveling turnings	8.00 to	9.00
Cast iron borings	11.00 to	12.00
Low phos. 18 in. and under	72.00 to	73.00
Rails, random length	54.00 to	55.00
Rails, 2 ft. and under	74.00 to	75.00
No. 1 cupola cast	58.00 to	59.00
Heavy breakable cast	25.00 to	26.00
Drop broken cast	67.00 to	68.00

New York

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 34.00 to	$ 35.00
No. 2 hvy. melting	30.00 to	32.00
No. 2 dealer bundles	22.00 to	23.00
Mixed bor. and turn.	7.00 to	8.00
Machine shop turn.	4.00 to	5.00
Shoveling turnings	10.00 to	12.00
Clean cast. chem. borings	34.00 to	35.00
No. 1 machinery cast	89.00 to	90.00
Mixed yard cast	38.00 to	39.00
Heavy breakable cast	14.00 to	15.00
Stainless		
18-8 prepared solids	480.00 to	500.00
18-8 turnings	380.00 to	400.00
430 prepared solids	70.00 to	80.00
410 solids	60.00 to	70.00

Boston

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 38.00 to	$ 40.00
No. 2 hvy. melting	28.00 to	30.00
No. 1 dealer bundles	40.00 to	42.00
No. 2 bundles	29.00 to	31.00
No. 1 busheling	40.00 to	42.00
Shredder scrap	43.00 to	45.00
Machine shop turn.	3.00 to	5.00
Shoveling turnings	7.00 to	9.00
No. 1 machinery cast	105.00 to	110.00
Mixed cupola cast	28.00 to	30.00
Heavy breakable cast	8.00 to	10.00

San Francisco

No. 1 hvy. melting	$ 42.00 to	$ 44.00
No. 2 hvy. melting	34.00 to	36.00
No. 1 dealer bundles	29.00 to	31.00
No. 2 dealer bundles	13.00 to	15.00
Machine shop turn.	6.00 to	8.00
Cast iron borings	6.00 to	8.00
No. 1 cupola cast	85.00 to	87.00

Los Angeles

No. 1 hvy. melting	$ 41.00 to	$ 43.00
No. 2 hvy. melting	30.00 to	32.00
No. 1 dealer bundles	28.00 to	30.00
No. 2 dealer bundles	10.00 to	12.00
Machine shop turn.	6.00 to	8.00
Shoveling turnings	10.00 to	12.00
Cast iron borings	6.00 to	8.00
Elec. furnace, 1 ft. and under (foundry)	86.00 to	88.00
No. 1 cupola cast	88.00 to	90.00

Seattle

No. 1 hvy. melting	$ 60.00 to	$ 62.00
No. 2 hvy. melting	49.00 to	51.00
No. 2 bundles	39.00 to	41.00
No. 1 cupola cast	94.00 to	96.00
Mixed yard cast	81.00 to	83.00

Hamilton, Ont.

Brokers buying price per net ton on cars:

No. 1 heavy melting	$ 55.00
No. 2 heavy melting cut 2 ft. and under	52.00
No. 1 dealer bundles	60.00
No. 2 bundles	30.00
Mixed steel scrap	34.00
Bush. new fact. prep'd.	58.00
Bush. new fact. unprp'd.	50.00
Machine shop turn.	25.00
Short steel turn.	28.00
Mixed bor. and turn.	15.00
Cast scrap	48.00

Houston

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 67.00 to	$ 68.00
No. 2 hvy. melting	51.00 to	53.00
No. 2 bundles	34.00 to	36.00
Machine shop turn.	19.00 to	20.00
Crushed turnings	35.00 to	37.00
Shredder scrap	67.00 to	68.00
Cut structural plate 2 ft. and under	84.00 to	86.00
Unstripped motor blocks	58.00 to	60.00
Cupola cast	71.00 to	73.00

STEEL PRICES

Codes identify Producers listed in the Key on page 59. (Prices quoted are mill base prices in cents per pound unless otherwise noted and do not reflect extras or surcharges.) N.A. = Not available.

Billets, Blooms, Slabs

(Dollars per net ton)

Carbon Rerolling, Midwest	
W5	$366.00
N4	$366.00
West	
C6	$346.00
Carbon Forging, East	
B3(3), C10, U1	$453.00
R3	$453.00
Midwest	
R3, U1, W5	$453.00
S1	$453.00
C10	$453.00
K2	$453.00
W5	$453.00
West	
B3(2)	$463.00
C6	$453.00
South	
A7	$453.00
Alloy, East	
R3, C10	$492.00
B3	$492.00
Midwest	
W8, W5, C10	$492.00
S1, U1	$492.00
R3	$492.00
West	
B3	$502.00
C6	$469.00
South	
A7	$492.00

Piling Sheet Steel

(cents per lb)

Midwest	
U1	26.45

Structurals

Carbon, East	
B3(2)	23.90
U1, J3	23.90
Midwest	
A7	24.15
C20	22.90
W8	22.90
I3, T10, U1, N4	23.90
West	
C6	25.10
U1	24.40
B3(2)	21.65
South	
C16, U1	23.90
T10	22.90
A8	Cmp*
High-Strength, Low Alloy, East	
B3(2)	23.90
U1, J3	23.90
Midwest	
N4	23.90
W8	24.15
U1	23.90
I3	23.90
West	
U1, A7	24.40
B3(2)	21.65
South	
U1, C16	23.90
Wide Flange, Carbon, East	
B3	23.90
U1, A7, J3	23.90
Midwest	
U1	23.90
N4	23.90
I3	23.90
West	
U1	24.40
C6	24.15
South	
A7	24.15

Strip

Hot-Rolled, Carbon, Cut II Edge—all widths, East	
B3, U1	22.05
J3	22.05
Midwest	
A7, D1	22.05
I4	21.45
S1, J3, D1	22.05
W3	22.05
N4	22.55
W5	22.05
U1	22.05
B3, G2, I3, M2, R3, G3	22.05
West	
K1	20.80
B3	24.70
South	
R3	22.05
Cold-Rolled, Carbon Max. 25%, East	
E4	29.75
R7, S10, B4	29.60
P15	24.80
S7	Cmp*
U1	35.30
D1(1)	Cmp*
B4	31.55
Midwest	
G4	24.80
I4	35.30
W14	22.95
S1, J4	34.05
T4	Cmp*

*Composite pricing

West	
U1	33.25
High-Strength, Hot-Rolled, Low Alloy, Cut Edge & Mill Edge—all widths, (plus extras)*	
Midwest	
M2, G3, R3, W3, I4, J3, G2, I3	22.05
A7	22.05
S1	22.05
West	
K1	22.05
South	
R3	22.05
High-Strength, Cold-Rolled, Low Alloy, Mill Edge, East	
R7	29.00
Midwest	
S1	32.00
Alloy, Hot-Rolled, Midwest (plus extras)*	
S1	24.60
G4	25.80
I4	23.70
Alloy, Cold-Rolled, East	
C11, E4, M8	43.35
R7	32.75
B4	42.60
P15	32.10
Midwest	
I4	41.80
S1	42.30

Sheets

Hot-Rolled, Carbon (18 Ga & Hvyr), East	
B3	22.05
J3	22.05
U1	22.05
Midwest	
A7, U1, B3, G2, G3, I3, M2, R3, W3	22.05
S1, W5, D1	22.05
J3	22.05
I4	21.15
West	
U1	21.30
K1	22.05
South	
R3	22.05
Cold-Rolled, East, Class I	
B3(2), U1	26.15
J3	26.15
Midwest	
B3, I3, G3, R3, M2, U1(2)	26.15
G2, W3, M11	26.15
I4	22.00
J3, A7	26.15
S1, W5, D1	26.15
West	
U1	26.65
South	
R3	24.65
Galvanized (hot-dipped), East	
B3(2), U1	28.00
Midwest	
J3, D1	28.00
I3, W5, S1	28.00
U1, A7, R3, Y1	28.00
G2, W3, M11	28.00
West	
K1	27.15
U1	28.50
South	
U1	28.00
R3	28.00
Enameling, Midwest	
A7, I3, U1, J3	27.65
S1	26.50
Long-Terne, Midwest	
W5	28.30
A7, U1	29.35
R3	29.35

Wire Rod

East	
B3(2)	22.35
U1	22.35
Midwest	
N4	22.35
U1, K2	22.35
West	
A7	22.00
C6	21.45
B3	23.25
South	
G7	22.35

Tinplate

Electrolytic Tinplate	
Single Reduced (70 lb)	
East	per base box
B3, J3	$26.29
U1	26.29
Midwest	
B3	$26.29
U1	26.29
J3	26.29
M11	26.29
W3	26.29
W5	26.29
West	
K1	$26.79
U1	26.79
South	
U1	$26.29
Double Reduced (55 lb)**	
Midwest	
M11 (50 lb)	$21.45
B3, J3	21.49
U1	21.49
W3	21.49
W5	21.49
West	
K1	$21.99
U1	21.99
South	
U1	$21.49
Black Plate	
Single Reduced (75 lb)*	
East	
B3	$24.01
Midwest	
J3	$24.01
M11	24.01
I3, U1, W5	24.01
W3	24.01
West	
K1	$24.01
U1	23.36
Double Reduced (55 lb)	
East	
B3	$18.93
Midwest	
M11	$18.93
W5, U1	18.93
J3	18.93
W3	18.93
W5	18.93
West	
U1	$18.93
South	
U1	$18.93

*70 lb—base weight extra 45¢
**50 lb—base weight extra $1.40

Bars

Carbon Steel, Hot-Rolled (Special quality)	
East	
R3, K3	25.80
R5	25.80
B3(3), J3	25.80
U1, C10	25.80
Midwest	
A7	23.95
U1, I3, I4, C20, N4	25.80
R3, T10	25.80
K2	25.80
I3	19.50*
West	
B3	25.80
C6	24.45
B3	24.70
South	
A8	20.65
A7	25.80
C16	25.80
Cold-Finished Carbon, East	
A11	22.15
R3	33.75
C21	21.15
J3(4), L2	31.00
C2	23.025
M8, W10, T11, S8	31.00
N1	24.475
R4	22.25
B4	31.00
M1	23.025
B4, C10	31.00
Midwest	
B5, W10, Y1, W8, R3	33.25
J3	31.00
B1	19.80
L2	30.75
N9	31.00
P3	19.85+CMS
W14	22.20
J3(3)	31.00
B5	31.25
J3	31.00
West	
B5	31.20
B5	34.90
R3	37.15
South	
B5	32.85
J3	34.00
C16	24.40
J3	31.95
Alloy, Hot-Rolled, East	
B3(2), R5, K3, C10, U1	27.95
R3	27.95
J3	27.95
Midwest	
A7, U1, R3	27.95
I3, C10	27.95
I4	24.85
I3	21.00*
West	
B3	27.95
B5	18.50
C6	26.60
B3	27.10
South	
A7	24.85
A8	22.00
Alloy, Cold Drawn, East	
L2	35.20
R3, N1, C2	37.90
M1	28.025
R4	25.65
A11	30.50
J3, W10, L2	34.85
T11, S8	34.85
C10	34.85
J3(2)	34.25
Midwest	
B5, R3, C10	37.35
C2	28.275
J3, M9, W10	34.85
P3	22.75
B1	22.70
N9	34.85
L2	34.65
B5	35.10
J3	36.00
J3	34.85
West	
R3	40.75
B5	35.20
B5	38.25
South	
J3	35.85
C16	28.00
B5	36.75

Plates

Carbon Steel, East	
B3(2), U1	25.75
L4	25.75
P2	25.75
J3	26.75
Midwest	
B3, R3, S1	25.75
I3	24.25
J3, A7	22.80
U1, I4	25.75
R3	26.75
West	
A7, B3, C6, O2	24.25
K1	23.50
U1	25.75
South	
R3	25.75
A7	25.75
U1	25.75
Alloy, East	
B3, J3	33.55
U1, L4	33.55
P2	33.55
J3	34.55
Midwest	
B3	33.55
G2, G3	33.55
I4, U1	33.55
West	
B3	33.55
O2	30.55
K1	31.30
South	
A7	27.55

Wire

Carbon Steel Wire, East	
B3(2)	27.10
U1	27.70
A11	22.15
Midwest	
U1	27.70
A7, R3	24.60
N4, W7	27.40
K2	24.20
South	
A8	22.85
West	
A7	25.95
C6	24.95

STEEL PRICES

Producer Key
With Principal Offices

A4 American Cladmetals Co., Carnegie, Pa.
A7 Armco Inc., Middletown, Ohio
A8 Atlantic Steel Co., Atlanta, Ga.
A11 Atlantic Wire Co., Branford, Conn.

B1 Baron Drawn Steel Corp., Toledo, Ohio
B3 Bethlehem Steel Corp., Bethlehem, Pa.
B4 Blair Strip Steel Co., New Castle, Pa.
B5 Bliss & Laughlin Steel Co., Harvey, Ill.

C1 Calstrip Corp., Los Angeles
C6 CF&I Steel Corp., Pueblo, Colo.
C10 Copperweld Steel Co., Warren, Ohio
C11 Crucible Divisions, Colt Industries, Pittsburgh, Pa.
C15 G. O. Carlson, Inc., Thorndale, Pa.
C16 Connors Steel Co., Birmingham, Ala.
C20 Calumet Steel Div., Chicago Heights, Ill.
C21 Cumberland Steel Co., Cumberland, Md.

D1 Detroit Strip Div., Cyclops Corp.
D2 Driver Wilbur B., Co., Newark, N. J.
D3 Driver Harris Co., Harrison, N. J.

E3 Enamel Products & Plating Co., McKeesport, Pa.
E4 Elliot Bros. Steel Co., New Castle, Pa.

F1 Firth Sterling, Inc., McKeesport, Pa.

G2 Granite City Steel Co., Granite City, Ill.
G3 Great Lakes Steel Division, National Steel Corp., Ecorse, Mich.
G4 Greer Steel Co., Dover, O.
G5 Green River Steel Corp., Owensboro, Ky.
G6 Gibraltar Steel Corp., Buffalo, N. Y.
G7 Georgetown Steel Corp., Georgetown, S. C.
G8 Guterl Special Steel Corp.

H1 Hercules Drawn Steel Corp., Livonia, Mich.

I2 Ingersoll Steel Div., New Castle, Ind.
I3 Inland Steel Co., Chicago, Ill.
I4 Interlake Steel Corp., Chicago

J2 Jessop Steel Corp., Washington, Pa.
J3 Jones & Laughlin Steel Corp., Pittsburgh
J4 Joslyn Mfg. & Supply Co., Chicago
J5 Judson Steel Corp., Emeryville, Calif.

K1 Kaiser Steel Corp., Fontana, Calif
K2 Keystone Consolidated Industries, Inc.
K3 Kentucky Electric Steel Co., Ashland, Kentucky
K5 Kemco Div., Foote Mineral Co., Keokuk, Iowa

L2 La Salle Steel Co., Chicago
L3 Lone Star Steel Co., Dallas
L4 Lukens Steel Co., Coatesville, Pa.
L5 Litho-Strip Corp., Chicago

M2 McLouth Steel Products Corp.
M4 Mid States Steel & Wire Co., Crawfordsville, Ind.
M8 Mill Strip Products Div., National Steel Service Center, National Steel Corp.
M9 Moltrup Steel Products Co., Beaver Falls, Pa.
M11 Midwest Steel Div., National Steel Corp., Portage, Ind.

N1 Northeast Precision Steel Co., Boston, Mass.
N4 Northwestern Steel & Wire Co., Sterling, Ill.
N6 Northwest Steel Rolling Mills, Seattle, Wash.
N9 Nelsen Steel & Wire Co., Chicago, Ill.
N10 North Star Steel Co., Saint Paul, Minnesota

O2 Oregon Steel Mills, Portland, Ore.

P2 Phoenix Steel Corp., Claymont, Del.
P3 Wyckoff Steel Div., Plymouth, Mich.
P9 Pacific States Steel Co., Niles, Cal
P13 Penn Dixie Steel Corp., Kokomo, Ind.
P14 Pacific Tube Co., Los Angeles
P15 Philadelphia Steel and Wire Corp., Phila.

R3 Republic Steel Corp., Cleveland
R4 Ramco Steel Co., Buffalo, N. Y.
R5 Roblin Steel Corp., Inc., North Tonawanda, N. Y.
R6 Rodney Metals, Inc., New Bedford, Mass.
R7 Rome Strip Steel Co., Rome, N. Y.

S1 Sharon Steel Corp., Sharon, Pa.
S7 Stanley Works, New Britain, Conn.
S8 Superior Drawn Steel Co., Monaca, Pa.
S10 Seneca Steel Service, Buffalo, N. Y.
S16 Southern Precision Steel Co., Gulfport, Miss.

T4 Thomas Steel Strip Co., Warren, O.
T5 Timken Company, Steel Division, Canton, O.
T7 Texas Steel Co., Fort Worth, Tex.
T9 Triumph Electro Corp., Chicago, Ill.
T10 Tennessee Forging Steel Corp., Harriman, Tenn.
T11 Teledyne Columbia-Summerill, Carnegie, Pa.

U1 United States Steel Corp., Pittsburgh, Pa.

W3 Weirton Steel Division, National Steel Corp., Weirton, West Va.
W5 Wheeling-Pittsburgh Steel Corp.
W7 Wilson Steel & Wire Co., Chicago
W10 Wyckoff Steel Div., Ampco-Pittsburgh Corp., Pittsburgh, Pa.
W14 Whittaker Steel Strip Div., Detroit, Mich.

Steel Service Center Prices

Price, Dollars per 100 lb

Cities*	Sheets			Strip	Plates	Shapes	Bars		Alloy Bars			
City Delivery Charge*	Hot-Rolled (10 gage)	Cold-Rolled (20 gage)	Galvanized (16 gage)	Hot-Rolled Strip	Plates	Standard Structurals	Hot-Rolled (merchant)	Cold Finished	Hot-Rolled 8620 As Rolled	Hot-Rolled 4140 Annealed	Cold-Drawn 8620 As Rolled	Cold-Drawn 4140 Annealed
Atlanta	21.50	27.34	30.57	31.16	22.87	24.68	17.11	31.65	42.10	52.60	69.58	73.19
Baltimore	27.73	26.59	34.60	36.75	25.30	28.64	18.94	36.44	55.85	59.91	69.79	76.32
Birmingham	21.20	27.48	30.66	31.63	22.73	24.36	16.92	31.57	49.31	68.90	68.16	74.43
Boston	24.28	28.00	33.94	44.44	37.16	37.52	20.68	40.96	48.40	52.69	62.29	67.33
Buffalo	28.17	33.76	39.72	43.01	34.96	28.77	17.57	40.86	39.03	48.82	56.33	64.06
Chicago	22.53	27.93	31.22	33.65	24.20	26.21	15.74	31.00	35.14	39.05	44.41	50.25
Cincinnati	24.03	28.04	32.58	34.04	25.06	28.78	15.00	30.33	35.17	40.02	45.20	51.15
Cleveland	26.57	31.04	33.35	32.65	27.23	28.47	15.55	32.90	36.23	41.57	46.44	52.48
Denver	32.01	38.28	36.73	41.26	36.46	35.59	21.15	44.51	51.78	59.12	67.62	75.96
Detroit	24.29	30.15	31.72	36.37	28.87	34.81	19.22	38.22	35.65	39.68	56.96	51.26
Houston	23.32	29.62	33.90	41.35	34.12	38.36	17.62	39.25	39.28	45.22	53.75	60.10
Kansas City	24.43	28.21	31.43	30.53	30.66	33.35	17.37	34.33	42.43	51.71	57.20	64.82
Los Angeles	30.05	33.60	39.14	45.92	37.83	38.95	33.49	50.38	62.24	72.74	78.34	88.90
Memphis	27.30	34.46	35.72	36.37	28.87	34.81	19.22	35.22	52.82	56.96	67.85	77.44
Milwaukee	23.40	30.52	33.14	32.33	25.23	28.96	15.39	34.80	35.61	41.88	46.30	53.45
New York	23.60	28.46	32.55	42.75	31.67	33.54	19.44	41.89	46.59	53.04	62.17	69.31
Philadelphia	27.46	33.12	36.20	46.29	32.68	35.97	19.45	39.41	46.41	52.66	62.06	69.23
Pittsburgh	25.68	30.43	34.47	41.36	34.34	29.51	20.40	41.06	46.51	54.05	61.11	68.86
Portland	29.67	37.16	41.51	33.10	34.82	38.20	33.64	56.85	61.00	64.10	78.49	....
San Francisco	29.58	36.18	40.25	45.78	38.70	39.18	27.12	51.14	63.09	72.30	78.49	86.10
Seattle	29.85	35.14	38.44	46.76	32.89	35.32	31.48	51.38	64.02	70.14	73.83	87.67
Spokane	21.08	30.56	33.56	36.69	35.18	25.16	20.32	41.00	42.02	46.30	....	58.32
St. Louis	24.45	29.30	33.56	35.43	28.84	29.68	15.88	32.95	38.46	43.65	51.02	57.48
St. Paul	23.96	28.55	32.40	35.20	27.86	28.12	15.25	34.13	36.60	41.88	46.58	53.31

Base Quantities. All HR products may be combined for quantity. Hot-rolled sheet, 10 ga x 36 x 96—120; Cold-rolled sheet, 20 ga x 36 x 120; Galv. sheet—16 ga x 36—120; Hot-rolled strip—⅛" x 1"; Plate ¼" x 84/; Shapes—I-Beams 6 x 12.5; Hot-rolled bar—Rounds ¾-2¹⁵/₁₆; Cold finished bar—C 1018—1" rounds; Alloy bar—Hot-rolled 8620—1⅝" round; Cold drawn—1" round; Hot-rolled 4140—1⅝" round; Cold drawn—1" round. Check local supplier for additions or deductions from base.

*Prices at all points include metropolitan delivery charges.

METALWORKING PRICE TRENDS

Prices: Down and down they go

The great price sag continued through April. Prices of producer finished goods fell by 0.1 pct from March. This marked the third month of price decline over the first four months of the year.

Through the four-month period, these prices, at an annual rate, fell by 3.7 pct. That's the longest trend of falling prices since the 1960s.

The overall producer finished goods price decline in April obscured some strong crosscurrents. Energy prices fell by 2.8 pct; food prices rose by 1.2 pct.

Too, prices of metalworking goods followed closely the overall downtrend in April tags. The 22 key metalworking product lines shown on the table here had a fractional decline for the month. And, as was true for the larger price picture for the month, there were price contrasts in the movement of metalworking tags. Miscellaneous metal products showed a 1.6 pct price decline for the month, while prices of industrial process furnaces rose by 0.8 pct.

Much of the cross-movement in prices in April centered on capital equipment lines. Overall, the producer price index for capital equipment declined by 0.3 pct on a seasonally adjusted basis. Most of this price decline was due to lower tags on new autos.

Softer prices were also scored in April for machine tools, railroad equipment and mining machinery. And pulling on the up-side on prices were those for agricultural machinery, aircraft, generators and transformers.

The good news on prices—which is not so good where lower tags are eating into profits—is likely to be shaded in coming months. After all, the great price sag seen so far this year is largely the handiwork of the recession.

Very predictably, as business activity picks up further, the price-depressant effect of the recession will fade away. Then, hotter market demand will start to push up tags.

Still, nobody is saying that all-out inflation will be roaring back onto the scene. Productivity is improving strongly, wage demands have moderated and foreign competition remains intense. One economist, who has a good price forecasting record, is predicting a 1 pct rise in the producer price index for all of this year. That would be the smallest increase since 1964.

Too, profits can continue to improve in the face of all this price softness because of lower breakeven points achieved by companies during the recession.

Latest Month Covered: April, 1983

Products	Index Reading For Month (1967 = 100)	Pct Change From Previous Month	Pct Change From Year-Ago Month
Metal Cutting Machine Tools	375.5	+ 0.2	+ 1.9
Metal Forming Machine Tools	414.8	+ 0.1	+ 3.9
Agricultural Machinery & Equip.	324.8	+ 0.6	+ 5.9
Construction Machinery & Equip.	350.8	+ 0.3	+ 2.7
Industrial Process Furnace & Ovens	361.2	+ 0.8	+ 3.4
Industrial Material Handling Equip.	284.8	− 0.1	− 1.2
Pumps, Compressors & Allied Equip.	347.8	0	− 0.1
Fluid Power Equip. (Dec. 1970 = 100)	251.3	− 0.1	+ 4.1
Mechanical Power Transmission Equip.	314.8	+ 0.1	+ 1.1
Automobiles	216.5	− 1.1	+ 3.3
Motor Trucks—Light	270.1	− 1.2	+ 6.3
Motor Trucks--Heavy	317.6	0	+ 5.5
Railroad Equipment	357.2	− 0.1	+ 4.0
Fabricated Metal Structural Products	302.6	− 0.4	− 0.9
Electric Motors	303.2	+ 0.1	+ 3.5
Valves (Metal, Ex-Fluid Power—Dec. 1982=100)	100.3	+ 0.3	NA
Ball & Roller Bearings	331.2	0	− 0.8
Cutting Tools & Accessories	274.7	+ 0.5	+ 1.1
Heating Equipment	242.3	+ 0.5	+ 2.7
Plumbing Fixtures & Brass Fittings	287.5	+ 0.7	+ 2.6
Metal Containers	332.0	+ 0.1	+ 0.6
Miscellaneous Metal Products	285.3	− 1.6	+ 2.0

Data based on U.S. Labor Dept.'s Producer Price Index